

ABSTRACT

The present invention is directed to methods for designing ligands capable of binding to the kinase domain of the insulin-like growth hormone-1 (IGF-1) receptor with high affinity. Upon binding, these ligands are capable of acting as modulators of IGF1 activity. IGF1 modulators designed or identified using the methods of the invention may serve to inhibit an IGF1 activity or may serve to increase or prolong an IGF1 activity. Further provided are screening methods for identifying small molecules capable of binding to the tyrosine kinase domain of the IGF-I receptor.